An improved Mesh Adaption and Refinement approach to Cavitation Tracking (MARCT) of marine propellers in Computational Fluid Dynamics (CFD) modelling

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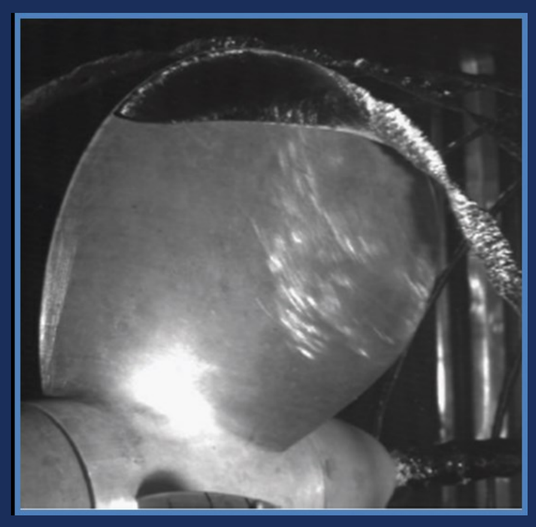
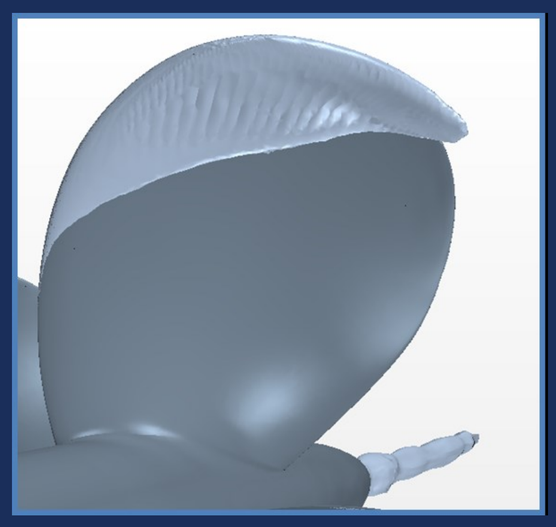
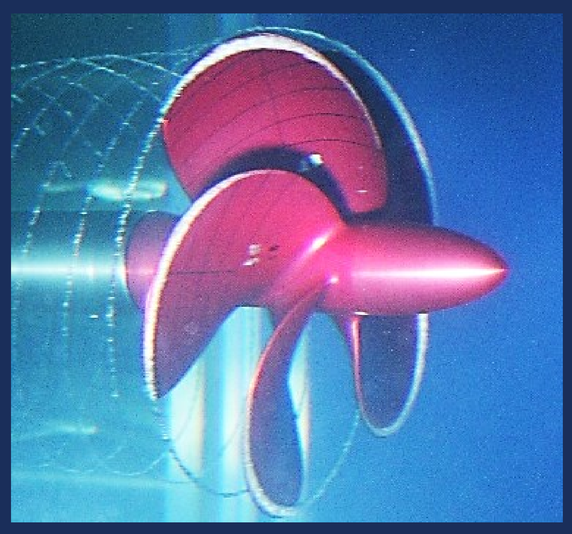
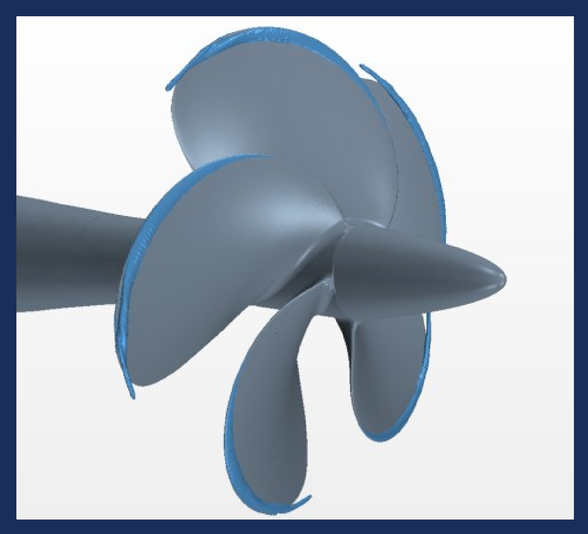
Propeller Cavitation on Blade Surface (Sheet Cavitation)



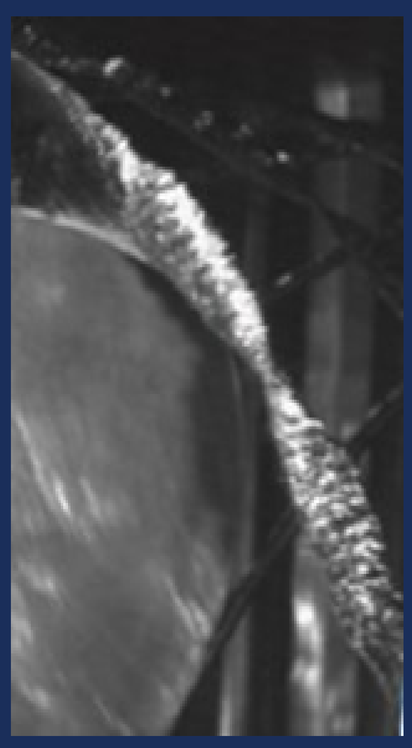


ORIGIN

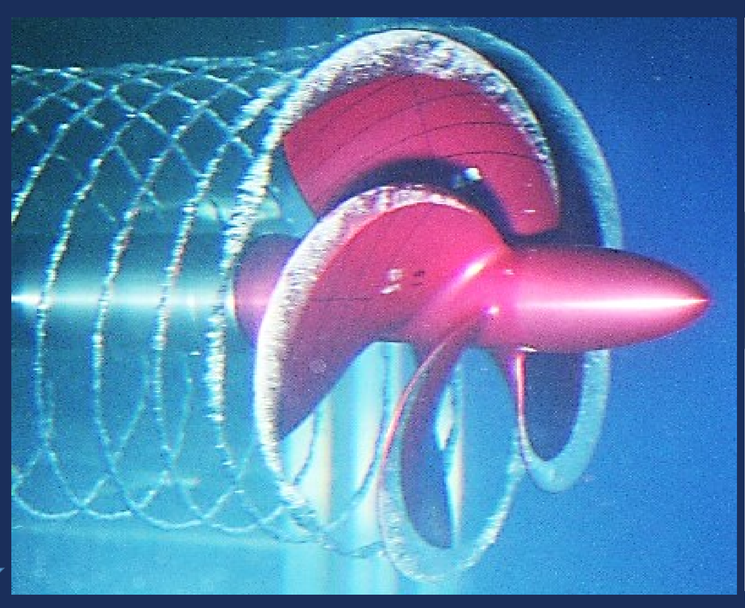


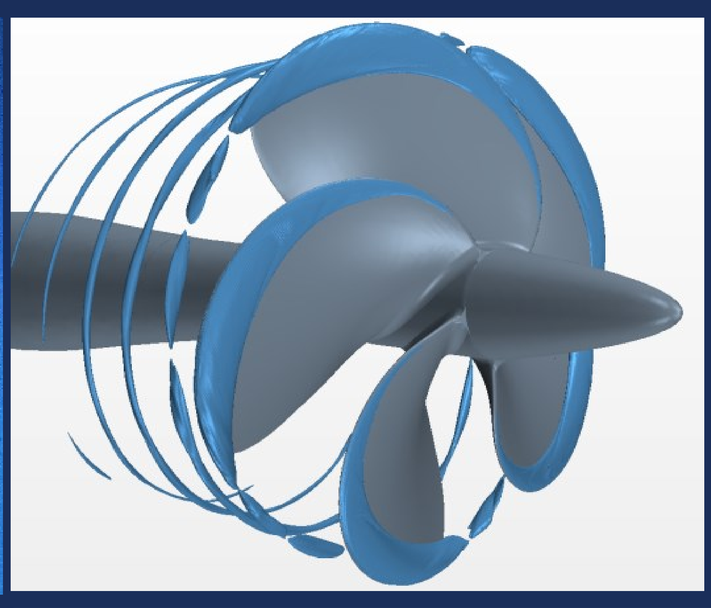


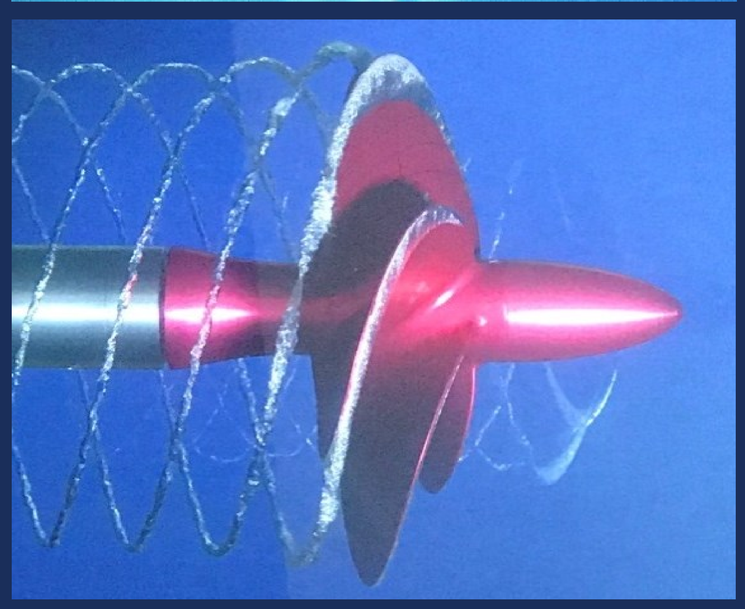
A New Mesh Adaption and Refinement Technique Applied to Propeller Tip Vortex Cavitation (MARCT) in CFD methods

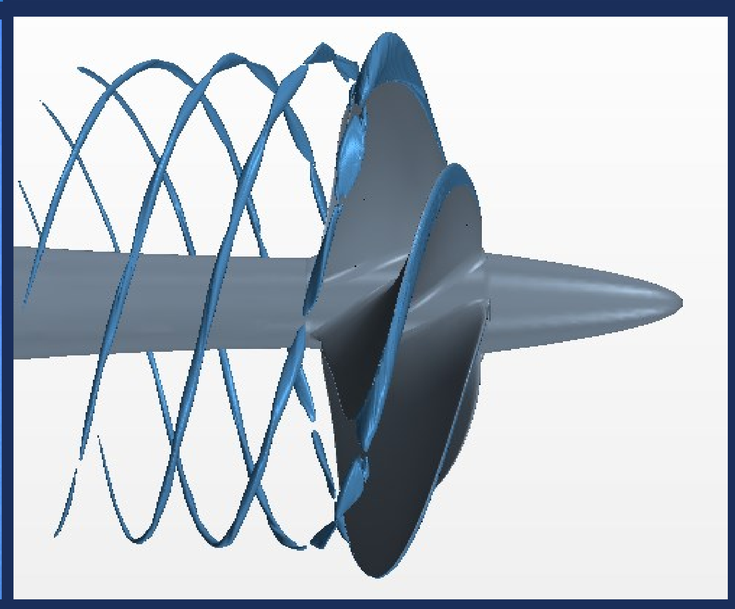


METHOD DEVELOPMENT





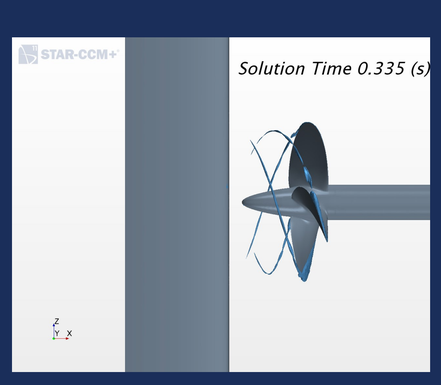


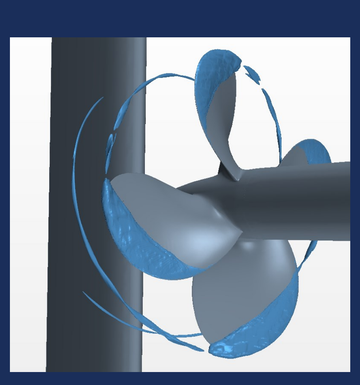


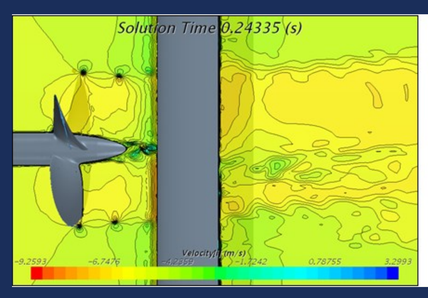
Run simulation → Get pressures → Create a threshold (pressure)

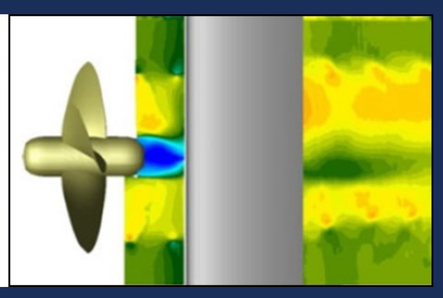
Create the field function → Generate a finer mesh → Run simulation & get the best tip vortex cavitation

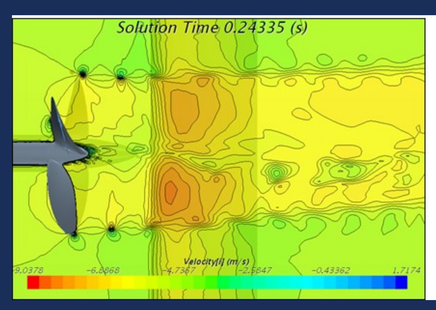
MARCT is being Applied to Propeller - Rudder Interaction & Underwater Radiated Noise Predictions

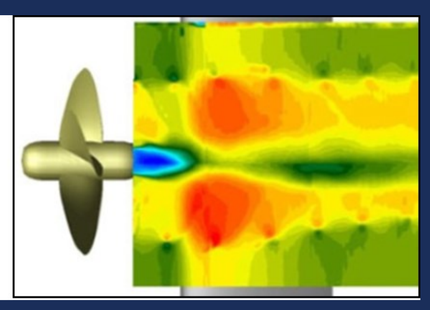












WORK IN PROGRESS